

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054887 A1

(51) International Patent Classification⁷: G01R 33/09, G01N 27/74

(74) Agents: VOLMER, Georg et al.; Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

(21) International Application Number:

PCT/IB2004/052546

(22) International Filing Date:

25 November 2004 (25.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03104536.2 4 December 2003 (04.12.2003) EP

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(71) Applicant (for DE only): PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]; Stein-damm 94, 20099 Hamburg (DE).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

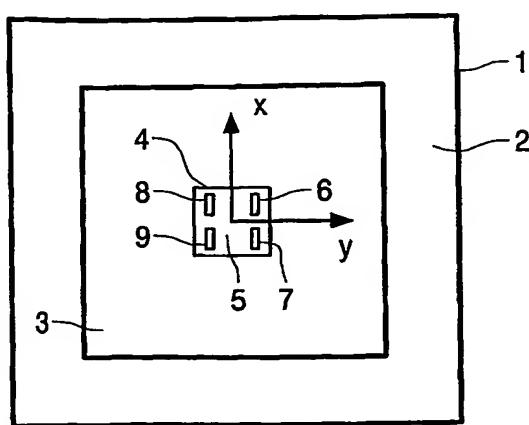
(75) Inventors/Applicants (for US only): BUCHHOLD, Reinhard [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE). DOESCHER, Michael [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE). BUTZMANN, Stefan [DE/DE]; c/o Philips Intellectual Property & Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MAGNETIC-FIELD-SENSITIVE SENSOR ARRANGEMENT



(57) Abstract: A magnetic -field-sensitive sensor arrangement comprises - a first conductor arrangement with at least two electrical half-bridges each having at least two bridge branches, at least one of which contains a magnetic-field-sensitive semiconductor element, which sensor arrangement supplies a measurement signal depending on the magnetic field strength of a component of a magnetic field at the location of at least one of the half-bridges, this being referred to as the measurement field and being aligned in a measurement direction of the sensor arrangement, and - a device which forms the measurement field with a value of its magnetic field strength, which depends on the magnetic permeability of a medium that at least partially surrounds the sensor arrangement, whereby the measurement signal is a measure of the magnetic permeability of the medium. A simple sensor arrangement for measuring a medium which affects a magnetic field is thus provided.